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10/678,151	10/06/2003	Reinhard Stuber	P23910	5748
7055	7590 06/27/2006		EXAMINER	
	IM & BERNSTEIN, P.	HINZE, LEO T		
1950 ROLAND CLARKE PLACE RESTON, VA 20191			ART UNIT	PAPER NUMBER
,			2854	

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Please find below and/or attached an Office communication concerning this application or proceeding.

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-		Application No.	Applicant(s)	W
		10/678,151	STUBER ET AL.	
	Office Action Summary	Examiner	Art Unit	
		Leo T. Hinze	2854	
Period fo	The MAILING DATE of this communication app or Reply	ears on the cover sheet with the	correspondence addres	·s
A SH WHIC - Exter after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DANS IN THE MAIL	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be will apply and will expire SIX (6) MONTHS from the country of the application to become ABANDO	ON. timely filed om the mailing date of this commu NED (35 U.S.C. § 133).	
Status				
2a)⊠	Responsive to communication(s) filed on <u>11 A</u> . This action is FINAL . 2b) This Since this application is in condition for alloward closed in accordance with the practice under Equation 1.	action is non-final. nce except for formal matters, p		rits is
Disposit	ion of Claims			
5)□ 6)⊠ 7)□	Claim(s) <u>1,2,4-6,8,10-20,22,23,25-31 and 34-4</u> 4a) Of the above claim(s) is/are withdraw Claim(s) is/are allowed. Claim(s) <u>1,2,4-6,8,10-20,22,23,25-31 and 34-4</u> Claim(s) is/are objected to. Claim(s) are subject to restriction and/o	wn from consideration.	ion.	
Applicat	ion Papers			
10)⊠	The specification is objected to by the Examine The drawing(s) filed on <u>26 October 2003</u> is/are Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Ex	: a)⊠ accepted or b)⊡ objector drawing(s) be held in abeyance. S ion is required if the drawing(s) is o	See 37 CFR 1.85(a). objected to. See 37 CFR 1.	
Priority (ınder 35 U.S.C. § 119			
a)	Acknowledgment is made of a claim for foreign ☐ All b ☐ Some * c ☐ None of: 1. ☐ Certified copies of the priority document 2. ☐ Certified copies of the priority document 3. ☐ Copies of the certified copies of the prio application from the International Bureau See the attached detailed Office action for a list	s have been received. s have been received in Applicative documents have been received in Rule 17.2(a)).	ation No ived in this National Stag	ge
2) Notic	te of References Cited (PTO-892) te of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summa Paper No(s)/Mail		2)
	mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) or No(s)/Mail Date	6) Other:	Tratent Application (F10-132	•1

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DETAILED ACTION

Claim Objections

1. Claim 38 is objected to because of the following informalities: "10" in line 1 does not

appear to belong.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public

use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 2, 4-6, 12, 18-20, 22, 25-31 and 34-48 are rejected under 35 U.S.C. 102(b) as

being anticipated by Feller et al., US 6,065,402 (hereafter Feller).

a. Regarding claim 1, Feller teaches a printing mechanism of a machine of the tobacco

processing industry comprising: a tempering device (7, 9, Fig. 1), structured and arranged to

adjust a temperature of ink in an ink supply (2, 3, Fig. 1) and metering device (4, 5, Fig. 1); said

tempering device comprises at least one of at least one cooling element (7, 9, Fig. 1), such that

said cooling element comprises a cooling plate (7, 9, Fig. 1); said ink supply and metering device

being at least partially located on said cooling plate (see Fig. 1). Because the preamble is not

necessary to breathe life and breadth into the body of the claim, the examiner does not consider

the recitation of "a machine of the tobacco processing industry" to further define the structure of

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the apparatus. Further, because a machine of the tobacco processing industry could comprise the structure taught by Feller, Feller can be considered to be capable of being a machine of the tobacco processing industry.

- b. Regarding claim 2, Feller teaches all that is claimed as discussed in the rejection of claim 1 above. Feller also teaches wherein the machine is capable of operating as a cigarette rod machine. The examiner is treating the recitation of "a cigarette rod machine" as functional language. While features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. Because claim 2 does not contain any further structural limitations, the examiner considers any printing machine capable of use as a cigarette machine. See MPEP § 2114. Further, because a cigarette rod machine could comprise the structure taught by Feller, Feller can be considered to be capable of being a cigarette rod machine.
- c. Regarding claim 4, Feller teaches all that is claimed as discussed in the rejection of claim 1 above. Claim 4 fails to patentably distinguish over the prior art because claim 4 recites limitations to an element that is optionally recited in claim 1.
- d. Regarding claim 5, Feller teaches all that is claimed as discussed in the rejection of claim 1 above. Claim 5 fails to patentably distinguish over the prior art because claim 5 recites limitations to an element that is optionally recited in claim 1.
- e. Regarding claim 6, Feller teaches all that is claimed as discussed in the rejection of claim 1 above. Claim 6 fails to patentably distinguish over the prior art because claim 6 recites limitations to an element that is optionally recited in claim 1.

- f. Regarding claim 12, Feller teaches all that is claimed as discussed in the rejection of claim 1 above. Feller also teaches wherein said tempering device comprises a control or regulating unit. The cooling device "ensures that the printing ink 3 always has the same temperature" (col. 3, 1l. 30-31). Because a constant temperature is maintained, a control or regulation device is inherently present to maintain this constant temperature.
- g. Regarding claim 18, Feller teaches a process for printing with a printing mechanism that includes a tempering device comprising at least one cooling element (7, 9, Fig. 1), said process comprising: adjusting a temperature of ink in at least an ink supply and metering device in the printing mechanism via the tempering device (col. 3, Il. 30-31); wherein the adjusting of the temperature of ink comprises adjusting a temperature of the printing mechanism with the cooling element (col. 3, Il. 30-31).
- h. Regarding claim 19, Feller teaches all that is claimed as discussed in the rejection of claim 18 above. Feller also teaches wherein the printing mechanism is located within a machine of the tobacco processing industry. Because a machine of the tobacco processing industry could comprise the structure taught by Feller, Feller can be considered to be capable of being a machine of the tobacco processing industry.
- i. Regarding claim 20, Feller teaches all that is claimed as discussed in the rejection of claim 18 above. Feller also teaches wherein said machine is a cigarette rod machine. Because a cigarette rod machine could comprise the structure taught by Feller, Feller can be considered to be capable of being a cigarette rod machine.

- j. Regarding claim 22, Feller teaches all that is claimed as discussed in the rejection of claim 18 above. Feller also teaches wherein the ink temperature is adjusted in the ink supply and the metering device by at least one heating element (the blade 5 acts as a heating element, Fig. 1).
- k. Regarding claim 25, Feller teaches all that is claimed as discussed in the rejection of claim 18 above. Feller also teaches flowing a medium through the cooling element ("coolant flows," col. 3, 1. 10).
- 1. Regarding claim 26, Feller teaches all that is claimed as discussed in the rejection of claim 18 above. Feller also teaches wherein at least some components of the printing mechanism are located at least partially on the cooling element, whereby the components are cooled by the cooling element (see arrangement of ink supply and metering device on cooling plates, Fig. 1).
- m. Regarding claim 27, Feller teaches all that is claimed as discussed in the rejection of claim 18 above. Feller also teaches wherein the at least one cooling element comprises a device producing a cooled air flow, and the ink temperature is adjusted by directing the cooled air flow toward a portion of the printing mechanism ("forced cooling via cold air," col. 1, ll. 66-67).
- n. Regarding claim 28, Feller teaches all that is claimed as discussed in the rejection of claim 18 above. Feller also teaches controlling or regulating the tempering device through a control or regulation device. The cooling device "ensures that the printing ink 3 always has the same temperature" (col. 3, Il. 30-31). Because a constant temperature is maintained, a control or regulation device is inherently present to maintain this constant temperature.

- o. Regarding claim 29, Feller teaches all that is claimed as discussed in the rejection of claim 18 above. Claim 29 fails to patentably distinguish over the prior art because claim 29 recites limitations to an element that is optionally recited in claim 18.
- p. Regarding claim 30, Feller teaches all that is claimed as discussed in the rejection of claim 18 above. Claim 30 fails to patentably distinguish over the prior art because claim 30 recites limitations to an element that is optionally recited in claim 18 (ink nozzle).
- q. Regarding claim 31, Feller teaches all that is claimed as discussed in the rejection of claim 18 above. Claim 31 fails to patentably distinguish over the prior art because claim 31 recites limitations to an element that is optionally recited in claim 18 (ink nozzle).
- Regarding claim 34, Feller teaches a process for printing a paper strip in a machine of the tobacco processing industry comprising a printing mechanism, said process comprising; guiding the cigarette paper strip to a printing mechanism having a tempering device (7, 9, Fig. 1; "rotary printing machine," col. 1, 1. 11 implies that a substrate is printed and guided to the printing mechanism); and adjusting at least the temperature of the ink in the printing mechanism via the tempering device (col. 3, 11. 30-31), wherein the adjusting of the at least one of the temperature and the viscosity of the ink comprises adjusting the temperature of the printing mechanism with a cooling element (7, Fig. 1). Because a machine of the tobacco processing industry could comprise the structure taught by Feller, Feller can be considered to be capable of being a machine of the tobacco processing industry.

- s. Regarding claims 35 and 42, Feller teaches all that is claimed as discussed in the rejection of claims 18 and 34 above. Feller also teaches wherein the cooling element includes a cooling plate (7, Fig. 1).
- t. Regarding claims 36 and 43, Feller teaches all that is claimed as discussed in the rejection of claims 35 and 34 above. Feller also teaches wherein the cooling plate features channels (8, Fig. 1).
- u. Regarding claims 37 and 44, Feller teaches all that is claimed as discussed in the rejection of claims 36 and 34 above. Feller also teaches wherein a pump is provided for conveying cooling fluid through the channels (coolant flows through the channels 8, which implies the presence of a pump to ensure that the fluid flows).
- v. Regarding claims 38 and 45, Feller teaches all that is claimed as discussed in the rejection of claims 18 and 34 above. Feller also teaches wherein the cooling element includes a heat exchanger (item 7 exchanges the heat from the blade into the fluid in channels 8, Fig. 1).
- w. Regarding claims 39 and 46, Feller teaches all that is claimed as discussed in the rejection of claims 18 and 34 above. Feller also teaches wherein the cooling element includes a cold air generator ("forced cooling via cold air," col. 1, ll. 66-67).
- x. Regarding claims 40 and 47, Feller teaches all that is claimed as discussed in the rejection of claims 18 and 34 above. Feller also teaches wherein the adjusting of the temperature of ink comprises adjusting the temperature of rollers and cylinders of the printing mechanism with the cooling element ("ink transfer roller to also be cooled," col. 2, Il. 9-11).

- y. Regarding claims 41 and 48, Feller teaches all that is claimed as discussed in the rejection of claims 18 and 34 above. Feller also teaches wherein the cooling takes place continuously or periodically (as continuously and periodically cover all the possibilities of how cooling can occur, and Feller teaches cooling occurs ("cooled with cold air," col. 2, l. 10) the cooling must be continuous of periodic.
- 4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:
 - (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 5. Claims 1, 2, 8 and 10-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Voge, US 6,516,721 (hereafter Voge).

Regarding claim 1, Voge teaches a printing mechanism of a machine capable of use in the tobacco processing industry comprising: a tempering device (70, Fig. 4), structured and arranged to adjust a temperature of ink in a least one of an ink nozzle (34, Fig. 4), ink supply (Fig. 4) and metering device; said tempering device comprises at least one of at least one heating device (70, Fig. 4). Because the preamble is not necessary to breathe life and breadth into the body of the claim, the examiner does not consider the recitation of "a machine of the tobacco processing industry" to further define the structure of the apparatus. Further, because a machine of the tobacco processing industry could comprise the structure taught by Voge, Voge can be considered to be capable of being a machine of the tobacco processing industry.

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a. Regarding claim 2, Voge also teaches wherein the machine can be used as a cigarette rod machine. The examiner is treating the recitation of "a cigarette rod machine" as functional language. While features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. Because claim 2 does not contain any further structural limitations, the examiner considers any printing machine capable of use as a cigarette rod machine. See MPEP §

b. Regarding claim 8, Voge teaches all that is claimed as discussed in the rejection of claim 1 above. Claim 8 fails to patentably distinguish over the prior art because claim 8 recites limitations to an element that is optionally recited in claim 1.

2114. Further, because a cigarette rod machine could comprise the structure taught by Voge.

Voge can be considered to be capable of being a cigarette rod machine.

- c. Regarding claim 10, Voge teaches all that is claimed as discussed in the rejection of claim 1 above. Claim 10 fails to patentably distinguish over the prior art because claim 10 recites limitations to an element that is optionally recited in claim 1.
- d. Regarding claim 11, Voge teaches all that is claimed as discussed in the rejection of claim 1 above. Claim 10 fails to patentably distinguish over the prior art because claim 10 recites limitations to an element that is optionally recited in claim 1.
- e. Regarding claim 12, Voge also teaches wherein said tempering device comprises a control or regulating unit ("heating device for heating the printing ink to a predetermined temperature", col. 2, ll. 20-22).

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f. Regarding claim 13, Voge also teaches wherein the ink nozzle is an ink nozzle (36, Fig.

4).

g. Regarding claim 14, Voge also teaches a heating cartridge (70, Fig. 4 shows a resistor

heating element) located to lie against said ink nozzle (note position of ink nozzle 36 with

respect to heating cartridge 70, Fig. 4).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 8. Claims 1 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blau et al., US 2001,0013289 A1 (hereafter Blau) in view of Voge.
- a. Regarding claim 1:

Blau teaches a printing mechanism (23, Fig. 2) of a machine of the tobacco processing industry comprising a tempering device (¶ 0012, lines 2-3). Blau teaches regulating certain other important parameters such as the consistency of printing ink (¶0047). Blau is silent as to the exact means used to regulate the consistency of the printing ink.

Voge teaches: said heating device (70, Fig. 4) being located with at least one of said ink supply (conduit 66, Fig. 4); that heating the ink has an effect on the viscosity and consistency of the ink (col. 3, lines 20-30).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Blau to heat the ink and locate the heating device in the ink supply, because Voge teaches that heating the ink is an effective way of regulating the consistency of the ink.

- b. Regarding claim 16, the combination of Blau and Voge teaches all that is claimed as discussed in the rejection of claim 1 above. Blau also teaches a plurality of distributor rollers (44, Fig. 2), a stamp roller (48, Fig. 2), and a pressure roller (52, Fig. 2), wherein two of said plurality of distributor rollers (43, 46, Fig. 2) are arranged to receive ink from said ink nozzle, and said stamp roller and said pressure roller are arranged to guide a paper strip to be printed (21, Fig. 2).
- 9. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Voge in view of Garner et al., US 5,611,278 (hereafter Garner).

Voge teaches all that is claimed as discussed in the rejection of claim 13 above, including a range of temperature and pressure, which implies sensors to ensure that proper pressure and

temperature are obtained, although Voge is silent as to the location of such sensors (col. 3, lines 20-30).

Voge does not teach a temperature sensor positioned one of: in and on said ink nozzle.

Garner teaches a temperature controlled system for printing press, including a refrigeration and heating system (col. 2, lines 2-3), and an ink temperature sensor located in the ink supply system (col. 2, lines 11-14).

It has been held that the mere rearrangement of parts is not sufficient to patentably distinguish over the prior art. See MPEP§ 2144.04(VI).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Voge to include a temperature sensor located in or on the ink nozzle, because Garner teaches a temperature sensor located in the ink supply, and a person having ordinary skill in the art would recognize that: a temperature sensor would make the regulation of temperature more efficient and accurate by allowing the control system to know the temperature of the ink, which would allow for more precise control of the temperature of the ink; locating the temperature sensor on the ink nozzle would minimize the temperature drop of the ink after being sensed, thereby allowing more accurate control of the ink temperature of the ink deposited on the rollers.

10. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Voge in view of Dillig et al., US 6,024,015 (hereafter Dillig).

Voge substantially teaches all that is claimed as discussed in the rejection of claim 1 above. Voge teaches controlling the pressure of the ink (col. 3, Il. 20-30), but is silent as to any pressure measurement devices.

Dillig teaches a pressurized inking system (Fig. 1), including a pressure monitor (17, Fig. 1) to ensure that an adequate ink supply is provided at all times.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Voge to include a pressure sensor in the ink nozzle, because Dillig teaches that pressure sensors in pressurized inking systems are advantageous for ensuring that an adequate ink supply is provided at all times.

11. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Feller in view of Voge.

Feller teaches all that is claimed as discussed in the rejection of claim 22 above.

Feller does not teach wherein the at least one heating element comprises a heating cartridge.

Voge teaches: said heating device (70, Fig. 4) being located with at least one of said ink supply (conduit 66, Fig. 4), including a heating cartridge (70, Fig. 4 shows a resistor heating element) located to lie against said ink nozzle (note position of ink nozzle 36 with respect to heating cartridge 70, Fig. 4); that heating the ink has an effect on the viscosity and consistency of the ink (col. 3, lines 20-30).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Feller wherein the at least one heating element comprises a

heating cartridge, because Voge teaches that heating the ink is an effective way of regulating the consistency of the ink.

Response to Arguments

- 12. The examiner would like to thank the applicant for pointing out that the 102(b) rejections under Voge were improper because Voge was not published more than one year prior to the filing of the instant application. Because Voge issued on an application that was filed on 22 December 1999, the examiner has corrected those rejections as being made under 35 U.S.C. § 102(e).
- Applicant's arguments, filed 11 April, with respect to the rejection of claims 18-20, 25-28 and 32-34 under 35 U.S.C. 102(b) as being anticipated by Voge have been fully considered and are persuasive. The examiner was relying on Voge to reject these claimed subject matter of a heating element. As the claims have been amended to remove the limitation of a heating element, these rejections have been withdrawn.
- 14. Some of applicant's arguments filed 11 April 2006 have been fully considered but they are not persuasive.
- 15. On p. 10, applicant argues that Feller does not teach controlling or adjusting the temperature of the ink. Feller teaches preventing excessive heating of the ink (col. 1, ll. 55-56). Preventing heating of the ink is controlling and adjusting the temperature of the ink by not allowing the temperature of the ink to rise excessively.
- 16. On p. 11, applicant argues that Feller does not teach a cooling plate in contact with an ink supply. Fig. 1 of Feller shows contact by the ink 3 in the ink supply 2 with the blade 5, which is

in contact with the cooling plate 7. A person having ordinary skill in the art would be knowledgeable in the science of heat transfer, and know that an arrangement shown in Fig. 1 would allow cooling plate 7 to control the temperature of the ink 3 in ink supply 2 through the blade 5.

- On p. 12, applicant argues that Feller only teaches preventing heating of the ink. Absent an mechanism to prevent heating of the ink, the temperature of the ink would increase. Because preventing heating of the ink keeps the ink at a constant temperature, Feller teaches adjusting the temperature of the ink.
- 18. On p. 13, applicant argues that Feller fails to disclose an ink supply, metering device, and ink nozzle. While Feller does not teach an ink nozzle, Feller does teach an ink supply (2, Fig. 1) and a metering device (5, Fig. 1). As the language of the claims requires "at least one of an ink nozzle, ink supply and metering device," Feller does anticipate the instant invention as discussed in the rejection of the claims above.
- Applicant argues on pp. 13-14 that Voge does not teach a cooling element. The examiner agrees. However, the examiner was not relying on Voge for a teaching of a cooling element. The claim language allows that only one of a heating element and a cooling element need be present, i.e. "at least one of," and, as far as such claim rejections under Voge are still valid in light of the claim amendments, said claim rejections remain as discussed in the rejections of the claims above.
- 20. Applicant traverses on pp. 15-17 that rejections under 35 U.S.C. § 103(a) over Voge in view of Blau. Applicant's arguments appear to be directed to Voge not teaching a cooling plate.

The examiner is relying on Voge to teach a heating element, not a cooling element. As far as the claims have not been currently amended to remove the "heating element," the rejection of these claims still stands.

- Applicant traverses on pp. 17-19 that rejections under 35 U.S.C. § 103(a) over Voge in view of Garner. Applicant's arguments appear to be directed to Voge not teaching a cooling plate. The examiner is relying on Voge to teach a heating element, not a cooling element. As far as the claims have not been currently amended to remove the "heating element," the rejection of these claims still stands.
- Applicant traverses on pp. 19-21 that rejections under 35 U.S.C. § 103(a) over Voge in view of Dillig. Applicant's arguments appear to be directed to Voge not teaching a cooling plate. The examiner is relying on Voge to teach a heating element, not a cooling element. As far as the claims have not been currently amended to remove the "heating element," the rejection of these claims still stands.

Conclusion

23. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this

final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leo T. Hinze whose telephone number is (571) 272-2167. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld can be reached on (571) 272-2168. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Leo T. Hinze Patent Examiner AU 2854 12 June 2006

REN YAN PRIMARY EXAMINER

Ken yan